

Public Health Preparedness and Situational Awareness Report: #2019:30

Reporting for the week ending 07/27/19 (MMWR Week #30)

August 2nd, 2019

CURRENT HOMELAND SECURITY THREAT LEVELS

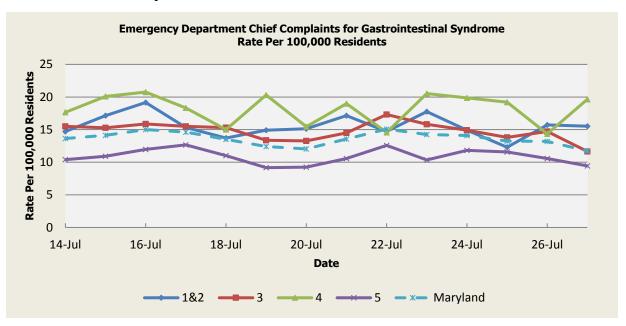
National: No Active Alerts

Maryland: Normal (MEMA status)

SYNDROMIC SURVEILLANCE REPORTS

ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics): Graphical representation is provided for all syndromes (excluding the "Other" category; see Appendix 1) by Health and Medical Regions (See Appendix 2). Emergency department chief complaint data is presented as rates per 100,000 residents using data from the 2010 census. Electronic Surveillance System for the Early Notification of Community-Based Epidemics (ESSENCE). Baltimore, MD: Maryland Department of Health; 2019.

Gastrointestinal Syndrome

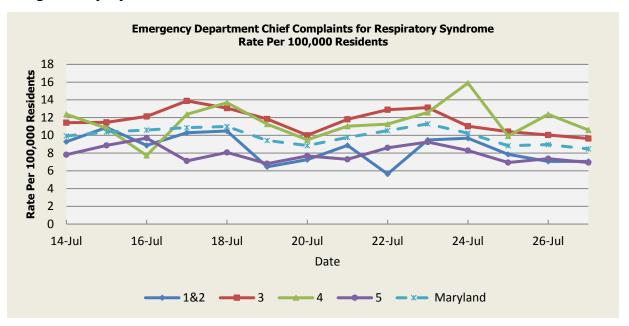


There were no Gastrointestinal Syndrome outbreaks reported this week.

	Gastrointestinal Syndrome Baseline Data January 1, 2010 - Present						
Health Region	1&2	3	4	5	Maryland		
Mean Rate*	13.27	15.10	15.92	10.24	13.15		
Median Rate*	13.11	14.87	15.46	10.13	13.02		

^{*} Per 100,000 Residents

Respiratory Syndrome

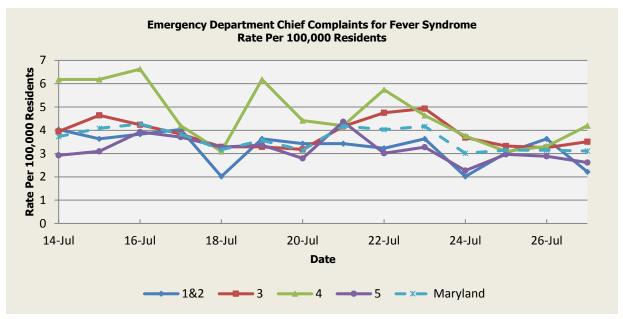


There were no Respiratory Syndrome outbreaks reported this week.

	Respiratory Syndrome Baseline Data January 1, 2010 - Present						
Health Region	1&2	3	4	5	Maryland		
Mean Rate*	12.63	14.72	15.06	9.96	12.75		
Median Rate*	12.10	14.18	14.35	9.65	12.26		

^{*} Per 100,000 Residents

Fever Syndrome

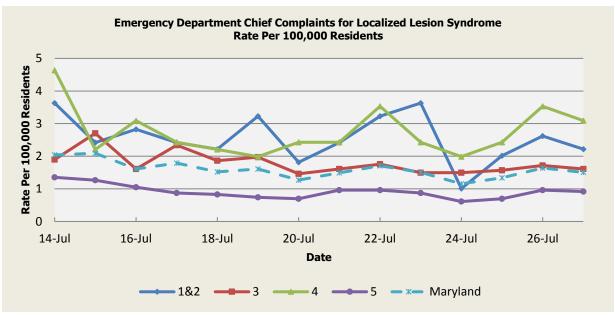


There were no Fever Syndrome outbreaks reported this week.

	Fever Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland	
Mean Rate*	3.08	3.90	4.12	3.04	3.52	
Median Rate*	3.02	3.80	3.97	2.92	3.40	

*Per 100,000 Residents

Localized Lesion Syndrome

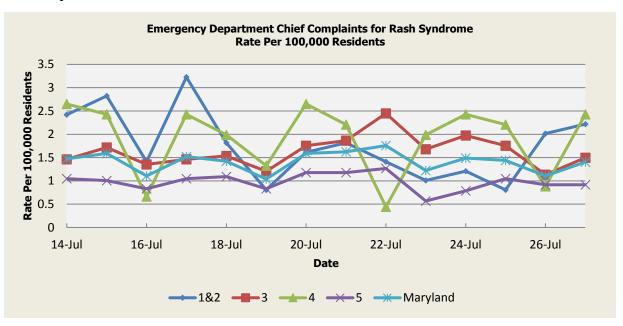


There were no Localized Lesion Syndrome outbreaks reported this week.

	Localized Lesion Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland	
Mean Rate*	1.14	1.79	2.04	0.91	1.42	
Median Rate*	1.01	1.72	1.99	0.87	1.37	

^{*} Per 100,000 Residents

Rash Syndrome

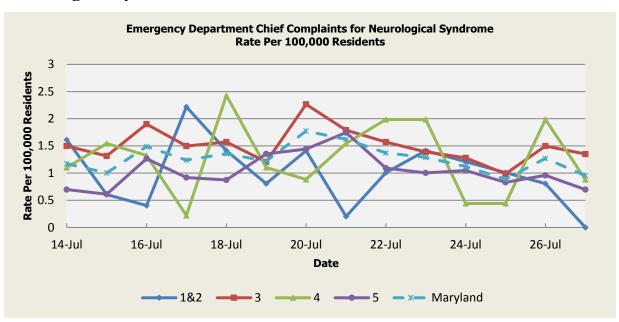


There were no Rash Syndrome outbreaks reported this week.

	Rash Syndrome Baseline Data January 1, 2010 - Present						
Health Region	1&2						
Mean Rate*	1.24	1.68	1.77	0.98	1.38		
Median Rate*	1.21	1.61	1.77	0.92	1.32		

^{*} Per 100,000 Residents

Neurological Syndrome

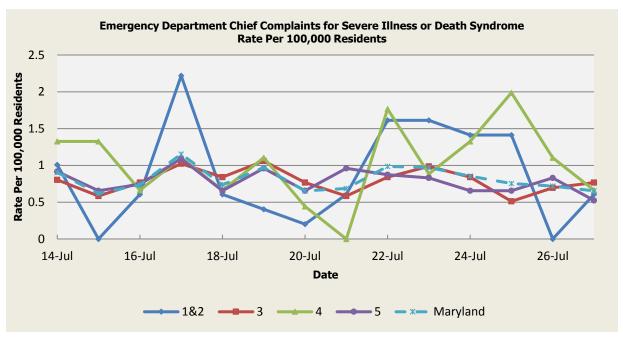


There were no Neurological Syndrome outbreaks reported this week.

	Neurological Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland	
Mean Rate*	0.78	0.95	0.86	0.60	0.79	
Median Rate*	0.81	0.84	0.66	0.52	0.70	

^{*} Per 100,000 Residents

Severe Illness or Death Syndrome



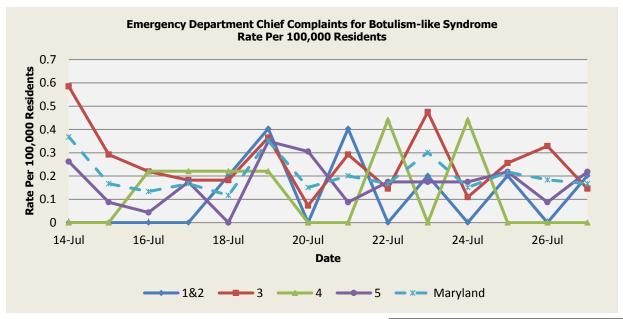
There were no Severe Illness or Death Syndrome outbreaks reported this week.

	Severe Illness or Death Syndrome Baseline Data January 1, 2010 - Present							
Health Region	1&2 3 4 5 Maryland							
Mean Rate*	0.66	0.90	0.83	0.51	0.73			
Median Rate*	0.60	0.84	0.66	0.48	0.69			

^{*} Per 100,000 Residents

SYNDROMES RELATED TO CATEGORY A AGENTS

Botulism-like Syndrome

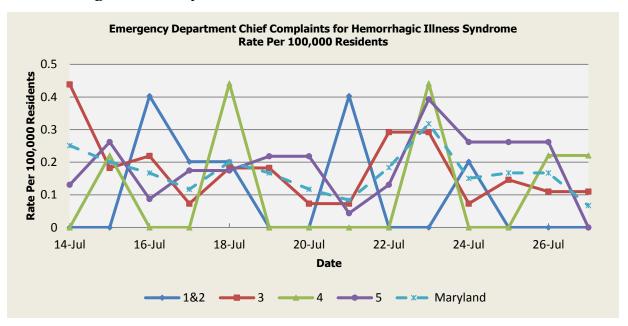


There was an appreciable increase above baseline in the rate of ED visits for Botulism-like Syndrome on 7/14 (Regions 3,5), 7/15 (Region 3), 7/16 (Region 4), 7/17 (Regions 4,5), 7/18 (Regions 1&2,4), 7/19 (Regions 1&2,3,4,5), 7/20 (Region 5), 7/21 (Regions 1&2,3), 7/22 (Regions 4,5), 7/23 (Regions 1&2,3,5), 7/24 (Regions 4,5), 7/25 (Regions 1&2,3,5),7/26 (Region 3), 7/27 (Regions 1&2,5). These increases are not known to be associated with any outbreaks.

	Botulism-like Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland	
Mean Rate*	0.07	0.12	0.06	0.08	0.10	
Median Rate*	0.00	0.07	0.00	0.04	0.08	

^{*} Per 100,000 Residents

Hemorrhagic Illness Syndrome

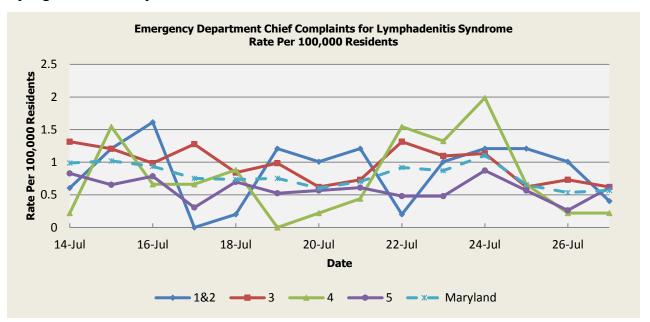


There was an appreciable increase above baseline in the rate of ED visits for Hemorrhagic Illness Syndrome on 7/14 (Region 3), 7/15 (Regions 4,5), 7/16 (Region 1&2), 7/17 (Region 1&2), 7/18 (Regions 1&2, 4), 7/21 (Region 1&2), 7/23 (Regions 4,5), 7/24 (Regions 1&2,5), 7/25 (Region 5),7/26 (Regions 4,5), 7/27 (Region 4). These increases are not known to be associated with any outbreaks.

	Hemorrhagic Illness Syndrome Baseline Data January 1, 2010 - Present						
Health Region	1&2	3	4	5	Maryland		
Mean Rate*	0.04	0.16	0.04	0.13	0.13		
Median Rate*	0.00	0.11	0.00	0.09	0.08		

^{*} Per 100,000 Residents

Lymphadenitis Syndrome



There was an appreciable increase above baseline in the rate of ED visits for Lymphadenitis Syndrome 7/14 (Regions 3,5), 7/15 (Regions 1&2,3,4), 7/16 (Regions 1&2,5), 7/17 (Region 3), 7/18 (Region 4), 7/19 (Region 1&2), 7/20 (Region 1&2), 7/21 (Region 1&2), 7/22 (Regions 3,4), 7/23 (Regions 1&2,4), 7/24 (Regions 1&2,4,5), 7/25 (Region 1&2),7/26 (Region 1&2). These increases are not known to be associated with any outbreaks.

	Lymphadenitis Syndrome Baseline Data January 1, 2010 - Present						
Health Region	1&2	3	4	5	Maryland		
Mean Rate*	0.37	0.59	0.40	0.38	0.48		
Median Rate*	0.40	0.47	0.44	0.35	0.42		

^{*} Per 100,000 Residents

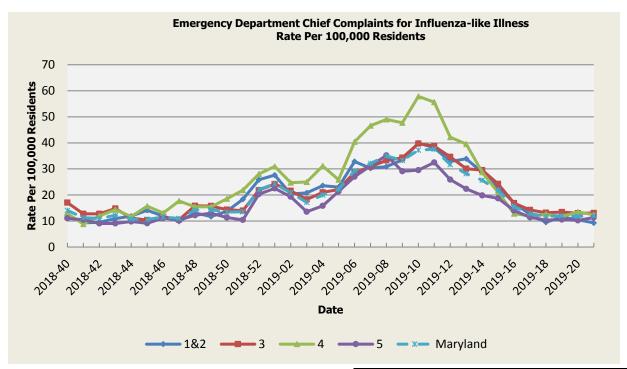
MARYLAND REPORTABLE DISEASE SURVEILLANCE

Reportable disease data from the National Electronic Disease Surfeeds into ESSENCE is currently being validated. We will include once the validation process is complete.	
	(report continues on next page

SYNDROMIC INFLUENZA SURVEILLANCE

Seasonal Influenza reporting occurs from MMWR Week 40 through MMWR Week 20 (October 2018 through May 2019).

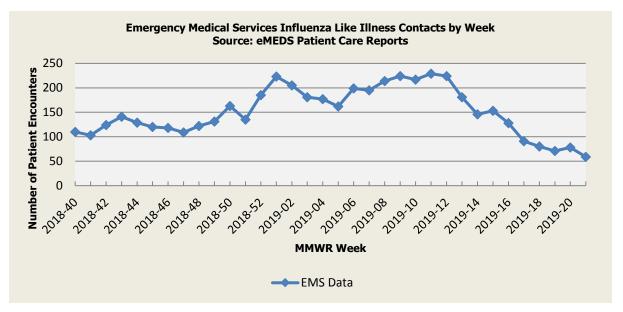
Influenza-like Illness



	Influenza-like Illness Baseline Data						
	Week 1 2010 - Present						
Health Region	1&2	3	4	5	Maryland		
Mean Rate*	10.20	13.31	12.85	11.28	12.24		
Median Rate*	7.66	10.30	9.27	8.77	9.44		

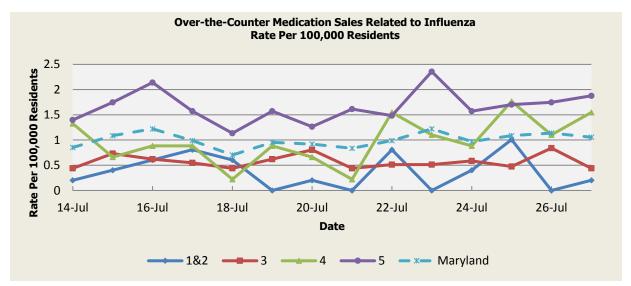
* Per 100,000 Residents

Influenza-like Illness Contacts by Week



Disclaimer on eMEDS flu related data: These data are based on EMS Pre-hospital care reports where the EMS provider has selected "flu like illness" as a primary or secondary impression of a patient's illness. This impression is solely based on the signs and symptoms seen by the provider, not on any diagnostic tests. Since these numbers do not include all primary or secondary impressions that may be seen with influenza the actual numbers may be low. These data are reported for trending purposes only.

Over-the-Counter Influenza-Related Medication Sales

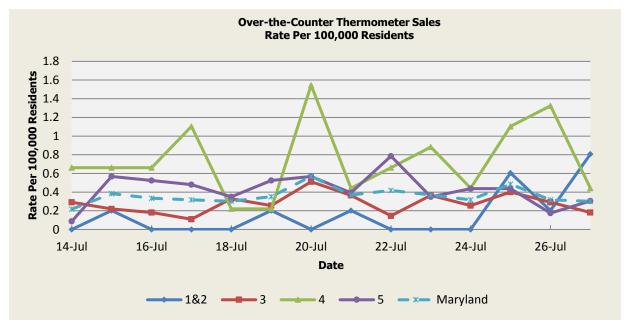


There was not an appreciable increase above baseline in the rate of OTC thermometer sales during this reporting period.

	OTC Medication Sales Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.50	4.52	2.69	7.89	5.59
Median Rate*	2.82	3.69	2.21	7.16	4.87

^{*} Per 100,000 Residents

Over-the-Counter Thermometer Sales



There was not an appreciable increase above baseline in the rate of OTC thermometer sales during this reporting period.

	Thermometer Sales Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	2.99	2.85	2.26	3.78	3.17
Median Rate*	2.62	2.74	2.21	3.67	3.08

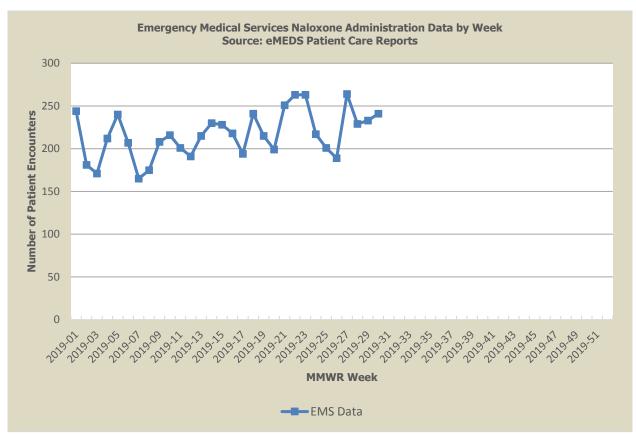
^{*} Per 100,000 Residents

SYNDROMIC OVERDOSE SURVEILLANCE

The purpose of this section is to characterize non-fatal ED visit trends for acute unintentional overdose by Heroin, Opioid or Unspecified substance among Maryland residents captured by ESSENCE data, including chief complaint and discharge diagnosis. ED visits that are identified as unintentional overdose by Heroin, Opioid or Unspecified substance include those with medical and non-medical use of a prescription Opioid or where the substance is not specified, given evidence that most fatal overdoses are Opioid-related.

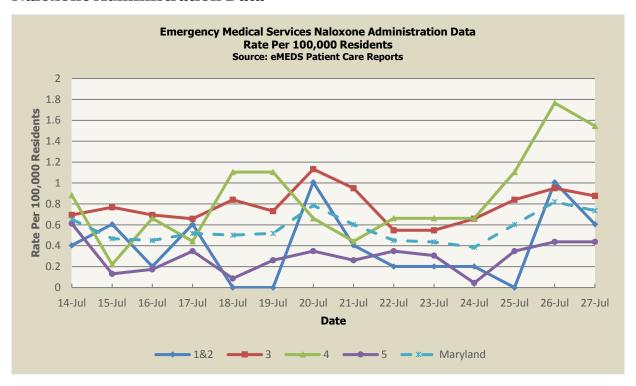
In preparation for the release of new ESSENCE queries for identifying heroin, opioid and all drug overdoses, please note that we have removed the data chart showing unintentional overdose rates by heroin, opioid, or unspecified substances. These new data, when available, will be presented below.

Naloxone Administration Data by Week



Disclaimer on eMEDS naloxone administration related data: These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.

Naloxone Administration Data



Disclaimer on eMEDS Naloxone administration related data: These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.

PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. Presently, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

Alert phase: This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national, and global levels are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the interpandemic phase may occur. As of August 1, 2019, the WHO-confirmed global total (2003-2019) of human cases of H5N1 avian influenza virus infection stands at 861, of which 455 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 53%.

AVIAN INFLUENZA

There were no relevant human avian influenza reports this week

HUMAN AVIAN INFLUENZA

There were no relevant human avian influenza reports this week

NATIONAL DISEASE REPORTS

MUMPS UPDATE (TEXAS) Aug 1 2019, About 100 new mumps cases have been identified in Texas immigrant-holding facilities in the last 5 weeks, according to reporting by News 88.7 in Houston, Texas. According to this Houston Public Media report on 29 Jul 2019, the new mumps cases include all federal facilities that hold immigrants, including Immigration and Customs Enforcement (ICE), Customs and Border Protection, and shelters that hold unaccompanied migrant children. Read More: https://www.promedmail.org/post/6601222

SALMONELLOSIS, SEROTYPE I 4,[5],12:I:- (MULTISTATE) Aug 1, 2019, CDC, public health and regulatory officials in several states, and the U.S. Food and Drug Administration (FDA) are investigating a multistate outbreak of multidrug-resistant _Salmonella_ serotypes I 4,[5],12:I. Read More: https://www.promedmail.org/post/6600332

E. COLI EHEC (**SOUTH DAKOTA**) 31 Jul 2019, The South Dakota Department of Health is investigating several cases of _E. coli_ in northeastern South Dakota. The cases are in and around the Sisseton area. Read More: https://www.promedmail.org/post/6598318

MURINE TYPHUS (TEXAS) Jul 31 2019, A San Antonio [Bexar County] veterinarian is warning pet owners and others to keep watch for and prevent a flea-borne disease after a case of it hospitalized her. Dr Olga Jaimez, believes she and one of her vet techs caught murine typhus while working at her clinic, 4 Paws Animal Hospital. Read More: https://www.promedmail.org/post/6597263

HEPATITIS A (**PHILADELPHIA**) 30 Jul 2019, Community leaders in Kensington say 2 residents have contracted hepatitis A within the last month and are encouraging neighbors to get vaccinated as soon as possible. Free vaccinations are currently being provided by the city for anyone worried about exposure. Read More: https://www.promedmail.org/post/6596253

RABIES (**OREGON**) 30 Jul 2019, A bat in Medford has tested positive for rabies, according to Jackson County Health and Human Services. Officials are warning citizens to take precautions after a local resident was bitten by a bat on [16 Jul 2019] 16th. According to Jackson Baures, Jackson County Public Health Division Manager, the bat was inside of the resident's house. Read More: https://www.promedmail.org/post/6595948

INFLUENZA (**MICHIGAN**) 28 Jul 2019, The Michigan Department of Agriculture and Rural Development identified pigs at the Fowlerville Family Fair testing positive for swine flu. The Fowlerville Fair Board isolated infected pigs to prevent additional exposure. Read More: https://www.promedmail.org/post/6592926

CYCLOSPORIASIS (MULTISTATE) 27 Jul 2019, The US Food and Drug Administration (FDA) and other authorities are [investigating] a multistate outbreak of _Cyclospora_ illnesses potentially linked to fresh basil imported from Mexico. Read More: https://www.promedmail.org/post/6590673

LEGIONELLOSIS (**VIRGINIA**) 27 Jul 2019, A press release from the Virginia Department of Health announced that 10 people are sick in Chesterfield, Virginia, in a legionnaires' disease outbreak. The 10 confirmed illnesses are more cases than the county sees during the summer, which is typically 3 cases. Due to this outbreak, a Chesterfield school was forced to close. The health department is working with the CDC to identify the outbreak source. Read More: https://www.promedmail.org/post/6591431

LEGIONELLOSIS (**CONNECTICUT**) 27 Jul 2019, The state Department of Public Health [DPH] has opened an investigation into a Rocky Hill nursing home after 2 residents were diagnosed with legionnaires' disease and one of them died. DPH officials said they are coordinating a review with management at the facility, Apple Rehab. Read More: https://www.promedmail.org/post/6591371

POWASSAN VIRUS ENCEPHALITIS (**MAINE**) 25 Jul 2019, The Maine Center for Disease Control and Prevention (CDC) is reporting the state's 1st case of the tick-borne Powassan virus

since 2017. The Powassan virus – which is rare but can cause severe illness – is much less common than other tick-borne diseases such as Lyme or anaplasmosis. Read More: https://www.promedmail.org/post/6587802

INTERNATIONAL DISEASE REPORTS

ACUTE FLACCID MYELITIS (NORTH AMERICA) 26 Jul 2019, As the prime season for acute flaccid myelitis (AFM) approaches, the US Centers for Disease Control and Prevention (CDC) has released a Vital Signs report

[https://www.cdc.gov/mmwr/volumes/68/wr/mm6827e1.htm] in the Morbidity and Mortality Weekly Report detailing the rare polio-like disease that mainly affects children. Read More: https://www.promedmail.org/post/6584492

LYME DISEASE (**UK**) 02 Aug 2019, Cases of Lyme disease in the UK may be 3 times higher than previous estimates, according to new research [1]. After analysing the anonymous medical records of 8.4 million people from across the UK, scientists forecast that the total number of Lyme disease diagnoses in the UK could top 8000 in 2019, compared with previous estimates of between 2000 and 3000 annual diagnoses. Read More: https://www.promedmail.org/post/6601464

BRUCELLOSIS (**TURKEY**) 02 Aug 2019, A total of 15 people engaged in animal fattening in the town and highlands of Kirkoy have been infected with brucellosis. A resident of the town said that many small ruminants in the town had suffered a miscarriage during the birth season and that 4 people in one family are now being treated for brucellosis. Read More: https://www.promedmail.org/post/6600568

ANTHRAX (**AZERBAIJAN**) 1 Aug 2019, 2 people have recently been diagnosed with anthrax in Azerbaijan's Sabirabad, one of whom passed away. According to statistics, 10 people were infected with anthrax in 2014, 9 in 2015, 10 in 2016, 6 in 2017, 9 in 2018, and 7 in 2019. Read More: https://www.promedmail.org/post/6600190

HIV DRUG RESISTANCE (GLOBAL) 31 Aug 2019, Health authorities have uncovered an alarming surge in resistance to crucial HIV drugs. Surveys by the World Health Organization (WHO) reveal that, in the past 4 years, 12 countries in Africa, Asia and the Americas have surpassed acceptable levels of drug resistance against 2 drugs that constitute the backbone of HIV treatment: efavirenz and nevirapine. Read More: https://www.promedmail.org/post/6598319

CARBAPENEMASE-PRODUCING KLEBSIELLA PNEUMONIAE (**EUROPE**) 31 Jul 2019, Killer bugs that are "extremely" resistant to antibiotics are spreading through European hospitals, experts have warned. As a result more people are dying after contracting the bugs. Read More: https://www.promedmail.org/post/6597316

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://preparedness.health.maryland.gov/ or follow us on Facebook at www.facebook.com/MarylandOPR.

More data and information on influenza can be found on the MDH website: http://phpa.health.maryland.gov/influenza/fluwatch/Pages/Home.aspx

Please participate in the Maryland Resident Influenza Tracking System (MRITS): http://flusurvey.health.maryland.gov

NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

Prepared By:

Office of Preparedness and Response, Maryland Department of Health 300 W. Preston Street, Suite 202, Baltimore, MD 21201 Fax: 410-333-5000

Peter Fotang, MD, MPH Epidemiologist, Biosurveillance Program

Office: 410-767-8438

Email: Peter.Fotang@maryland.gov

Jennifer Stanley, MPH Epidemiologist, Biosurveillance Program Office: 410-767-2074

Email: Jennifer.Stanley@Maryland.gov

Jessica Acharya (Goodell), MPH Career Epidemiology Field Officer, CDC

Office: 410-767-6745

Email: Jessica.Goodell@maryland.gov

Appendix 1: ESSENCE Syndrome Definitions and Associated Category A Conditions

Syndrome	ESSENCE Definition	Category A Conditions
Botulism-like	(Botulism or (DifficultyFocusing and DifficultySpeaking) or (DifficultySpeaking and DifficultySwallowing) or (DifficultySwallowing and DifficultyFocusing) or DoubleVision or FacialParalysis or GuillainBarre or Ptosis) and not GeneralExclusions	Botulism
Fever	(Chills or (FeverPlus and (Drowsiness or Seizure)) or FeverOnly or SepsisGroup or ViralSyndrome) and not GeneralExclusions	N/A
Gastrointestinal	(AbdominalCramps or AbdominalPainGroup or Diarrhea or FoodPoisoning or Gastroenteritis or GIBleeding or Peritonitis or Vomiting) and not (GeneralExclusions or Gynecological or Obstetric or Reproductive or UrinaryTract)	Anthrax (gastrointestinal)
Hemorrhagic Illness	(FeverOrChills and (AcuteBloodAbnormalitiesGroup or BleedingFromMouth or BleedingGums or GIBleeding or Hematemesis or Hemoptysis or Nosebleed or Petechiae or Purpura)) and not GeneralExclusions	Viral Hemorrhagic Fever
Localized Lesion	(Boils or Bump or Carbuncle or DepressedUlcer or Eschar or Furuncle or InsectBite or SkinAbscess or (SkinSores and not AllOverBody) or SkinUlcer or SpiderBite) and not (GeneralExclusions or Decubitus or Diabetes or StasisUlcer)	Anthrax (cutaneous) Tularemia
Lymphadenitis	(BloodPoisoning or Bubo or CatScratchDisease or SwollenGlands) and not GeneralExclusions	Plague (bubonic)
Neurological	(([Age<75] and AlteredMentalStatus) or (FeverPlus and (Confusion or Drowsiness or Petechiae or StiffNeck)) or Delirium or Encephalitis or Meningitis or UnconsciousGroup) and not GeneralExclusions	N/A
Rash	(ChickenPox or Measles or RashGeneral or Roseola or (Rubella and not Pregnancy) or Shingles or (SkinSores and AllOverBody) or Smallpox) and not GeneralExclusions	Smallpox
Respiratory	(Anthrax or Bronchitis or (ChestPain and [Age<50]) or Cough or Croup or DifficultyBreathing or Hemothorax or Hypoxia or Influenza or Legionnaires or LowerRespiratoryInfection or Pleurisy or Pneumonia or RespiratoryDistress or RespiratoryFailure or RespiratorySyncytialVirus or RibPain or ShortnessOfBreath or Wheezing) and not (GeneralExclusions or Cardiac or (ChestPain and Musculoskeletal) or Hyperventilation or Pneumothorax)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Severe Illness or Death	CardiacArrest or CodeGroup or DeathGroup or (Hypotension and FeverPlus) or RespiratoryArrest or SepsisGroup or Shock	N/A

Appendix 2: Maryland Health and Medical Region Definitions

Health and Medical Region	Counties Reporting to ESSENCE		
	Allegany County		
Pagions 1 & 2	Frederick County		
Regions 1 & 2	Garrett County		
	Washington County		
	Anne Arundel County		
	Baltimore City		
Region 3	Baltimore County		
Region 3	Carroll County		
	Harford County		
	Howard County		
	Caroline County		
	Cecil County		
	Dorchester County		
	Kent County		
Region 4	Queen Anne's County		
	Somerset County		
	Talbot County		
	Wicomico County		
	Worcester County		
	Calvert County		
	Charles County		
Region 5	Montgomery County		
	Prince George's County		
	St. Mary's County		

